

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Inventor(s): Alan F.Savicki

SC/Serial No.: 09/979, 525

Confirm. No.: 6341

Art Unit: 3677

Filed: November 21, 2001

For: CLOSURE DEVICE

Examiner: J.R.Brittain

PENDING CLAIMS AFTER AMENDMENTS

MADE IN RESPONSE TO OFFICE ACTION DATED DECEMBER 2, 2002

1. (Amended) A closure device comprising:

a first fastening strip;

a second fastening strip;

a slider adapted to be slidably disposed on said fastening strips and facilitating the occlusion of said fastening strips when moved towards a first end thereof and facilitating the deocclusion of said fastening strips when moved towards a second end thereof, said fastening strips and said slider having a longitudinal X axis and a transverse Y axis, said transverse Y axis being perpendicular to said longitudinal X axis, said fastening strips and said slider having a vertical Z axis, said vertical Z axis being perpendicular to said longitudinal X axis, said vertical Z axis being perpendicular to said transverse Y axis, a first end stop at said first end, said slider comprising a housing having a first jaw and a second jaw for engaging said first end stop when said slider is moved to said first end of said fastening strips and said first jaw and second jaw thereby preventing removal of said slider from said first end of said fastening strips in said longitudinal X axis, wherein said first jaw and said second jaw are located at the first end of the slider and wherein said first jaw and said second jaw define a first slot, said first slot has a first width, said first end stop has a second width, said second width is greater than said first width.

2. (Amended) The invention as in claim 1 having a second end stop at said second end and

wherein said housing having a third jaw for engaging said second end stop when said slide is moved to said second end of said fastening strips and said third jaw thereby preventing removal of said slider from said second end of said fastening strips in said longitudinal X axis.

3. (Amended) The invention as in claim 1 wherein said first jaw and said second jaw are positioned above the fastening strips.

4. (Amended) The invention as in claim 2 wherein said third jaw is located at the second end of the slider.

5. (Amended) The invention as in claim 2 wherein said third jaw is positioned above the fastening strips.

6. (Amended) The invention as in claim 2 wherein said third jaw is located at the second end of the slider and said third jaw is positioned above the fastening strips.

7. (Amended) The invention as in claim 2 wherein a fourth jaw and said third jaw are located at said second end of the slider.

8. (Amended) The invention as in claim 1 wherein the first end stop extends above the fastening strips.

9. (Amended) The invention as in claim 1 wherein the first end stop has a first surface which extends outwardly and a second surface which extends outwardly.

10. (Amended) The invention as in claim 2 wherein the second end stop has a first surface which extends outwardly.

11. (Amended) The invention as in claim 10 wherein said third jaw and said fourth jaw define a second slot, said second slot has a third width, said second end stop has a fourth width, said fourth width is greater than said third width.

12. (Amended) The invention as in claim 9 wherein said first surface is a first protrusion, said second surface is a second protrusion and said second width includes said first and second protrusions.

13. (Amended) The invention as in claim 9 wherein said first surface is a first planar surface, said second surface is a second planar surface and said second width includes said first and second planar surfaces.

14. (Amended) The invention as in claim 13 wherein said first planar surface includes a first protrusion, said second planar surface includes a second protrusion, said second width includes said first and second protrusions.

15. (Amended) The invention as in claim 9 wherein said first surface is a first protrusion, said first jaw engages said first protrusion, said second surface is a second protrusion, and said second jaw engages said second protrusion.

16. (Amended) The invention as in claim 9 wherein said first surface is a first planar surface, said first jaw engages said first planar surface, said second surface is a second planar surface, and said second jaw engages said second planar surface.

17. (Amended) The invention as in claim 16 wherein said first surface includes a first protrusion, said first jaw engages said protrusion, said second surface includes a second protrusion, and said second jaw engages said second protrusion.

18. (Amended) The invention as in claim 1, wherein said first jaw is inwardly biased for engaging said first end stop and wherein said second jaw is inwardly biased for engaging said first end stop.

19. The invention as in claim 1, wherein said fastening strips comprise U-channel closure type fastening strips.

20. The invention as in claim 1, wherein said fastening strips comprise arrowhead type fastening strips.

21. The invention as in claim 1, wherein said fastening strips comprise profile type fastening strips.

22. (Amended) A slider adapted to be slidably disposed on a first and second fastening strip wherein a first end stop is provided at a first end of said fastening strips, said slider facilitating the occlusion of said fastening strips when moved towards said first end thereof and facilitating the deocclusion of said fastening strips when moved towards said second end thereof, said slider comprising:

a longitudinal X axis and a transverse Y axis, said transverse Y axis being perpendicular to said longitudinal X axis, said slider having a vertical Z axis, said vertical Z axis being perpendicular to said longitudinal X axis, said vertical Z axis being perpendicular to said transverse Y axis;

a housing having a first jaw and a second jaw for engaging said first end stop when said slider is moved to said first end of said fastening strips and said first jaw and said second jaw thereby preventing removal of said slider from said first end of said fastening strips in said longitudinal X axis wherein said first jaw and said second jaw are located at the first end of the slider and wherein said first jaw and said second jaw define a first slot, said first slot has a first width, said first end stop has a second width, said second width is greater than said first width.

23. (Amended) The invention as in claim 22 having a second end stop at said second end and wherein said housing having a third jaw for engaging said second end stop when said slide is moved to said second end of said fastening strips and said third jaw thereby preventing removal of said slider from said second end of said fastening strips in said longitudinal X axis.

24. (Amended) The invention as in claim 22 wherein said first jaw and said second jaw are positioned above the fastening strips.

25. (Amended) The invention as in claim 23 wherein said third jaw is located at the second end of the slider.

26. (Amended) The invention as in claim 23 wherein said third jaw is positioned above the fastening strips.

27. (Amended) The invention as in claim 23 wherein said third jaw is located at the second end of the slider and said third jaw is positioned above the fastening strips.

28. (Amended) The invention as in claim 23 wherein a fourth jaw and said third jaw are located at a second end of the slider.

29. (Amended) The invention as in claim 22 wherein the first end stop extends above the fastening strips.

30. (Amended) The invention as in claim 22 wherein the first end stop has a first surface which extends outwardly and a second surface which extends outwardly.

31. (Amended) The invention as in claim 23 wherein the second end stop has a first surface which extends outwardly.

32. (Amended) The invention as in claim 31 wherein said third jaw and said fourth jaw define a second slot, said second slot has a third width, said second end stop has a fourth width, said fourth width is greater than said third width.

33. (Amended) The invention as in claim 30 wherein said first surface is a first protrusion, said second surface is a second protrusion, said second width includes said first and second protrusions.

34. (Amended) The invention as in claim 30 wherein said first surface is a first planar surface, said second surface is a second planar surface and said second width includes said first and second planar surfaces.

35. (Amended) The invention as in claim 34 wherein said first planar surface includes a first protrusion, said second planar surface includes a second protrusion, said second width includes said first and second protrusions

36. (Amended) The invention as in claim 30 wherein said first surface is a first protrusion, said second surface is a second protrusion, and said second jaw engages said second protrusion.

37. (Amended) The invention as in claim 30 wherein said first surface is a first planar surface, said first jaw engages said first planar surface, said second surface is a second planar surface, and said second jaw engages said second planar surface.

38. (Amended) The invention as in claim 37 wherein said first surface includes a first protrusion, said first jaw engages said protrusion, said second surface includes a second protrusion, and said second jaw engages said second protrusion.

39. (Amended) The invention as in claim 22, wherein said first jaw is inwardly biased for engaging said first end stop and wherein said second jaw is inwardly biased for engaging said first end stop.

40. (Amended) A container comprising:

first and second side walls, said first and second side walls including mating first and second fastening strips respectively, said first and second fastening strips comprising a closure device arranged to be interlocked over a predetermined length,

a slider adapted to be slidably disposed on said fastening strips and facilitating the occlusion of said fastening strips when moved towards a first end thereof and facilitating the deocclusion of said fastening strips when moved towards a second end thereof, said fastening strips and said slider having a longitudinal X axis and a transverse Y axis, said transverse Y axis being perpendicular to said longitudinal X axis, said fastening strips and said slider having a vertical Z axis, said vertical Z axis being perpendicular to said longitudinal X axis, said vertical Z axis being perpendicular to said transverse Y axis, a first end stop at said first end, said slider comprising a housing having a first jaw and a second jaw for engaging said first end stop when said slider is moved to said first end of said fastening strips and said first jaw and second jaw thereby preventing removal of said slider from said first end of said fastening strips in said longitudinal X axis wherein said first jaw and said second jaw are located at the first end of the slider and wherein said first jaw and said second jaw define a first slot, said first slot has a first width, said first end stop has a second width, said second width is greater than said first width.

41. (Amended) The invention as in claim 40 having a second end stop at said second end and wherein said housing having a third jaw for engaging said second end stop when said slide is moved to said second end of said fastening strips and said third jaw thereby preventing removal of said slider from said second end of said fastening strips in said longitudinal X axis.

42. (Amended) The invention as in claim 40 wherein said first jaw and said second jaw are positioned above the fastening strips.

43. (Amended) The invention as in claim 41 wherein said third jaw is located at the second end of the slider.

44. (Amended) The invention as in claim 41 wherein said third jaw is positioned above the fastening strips.

45. (Amended) The invention as in claim 41 wherein said third jaw is located at the second end of the slider and said third jaw is positioned above the fastening strips.

46. (Amended) The invention as in claim 44 wherein a fourth jaw and said third jaw are located at said second end of the slider.

47. (Amended) The invention as in claim 40 wherein the first end stop extends above the fastening strips.

48. (Amended) The invention as in claim 40 wherein the first end stop has a first surface which extends outwardly and a second surface which extends outwardly.

49. (Amended) The invention as in claim 41 wherein the second end stop has a first surface which extends outwardly.

50. (Amended) The invention as in claim 49 wherein said third jaw and said fourth jaw define a second slot, said second slot has a third width, said second end stop has a fourth width, said

fourth width is greater than said third width.

51. (Amended) The invention as in claim 48 wherein said first surface is a first protrusion, said second surface is a second protrusion and said second width includes said first and second protrusions.

52. (Amended) The invention as in claim 48 wherein said first surface is a first planar surface, said second surface is a second planar surface and said second width includes said first and second planar surfaces.

53. (Amended) The invention as in claim 52 wherein said first planar surface includes a first protrusion, said second planar surface includes a second protrusion, said second width includes said first and second protrusions.

54. (Amended) The invention as in claim 48 wherein said first surface is a first protrusion, said first jaw engages said first protrusion, said second surface is a second protrusion, and said second jaw engages said second protrusion.

55. (Amended) The invention as in claim 48 wherein said first surface is a first planar surface, said first jaw engages said first planar surface, said second surface is a second planar surface, and said second jaw engages said second planar surface.

56. (Amended) The invention as in claim 55 wherein said first surface includes a first protrusion, said first jaw engages said protrusion, said second surface includes a second protrusion, and said second jaw engages said second protrusion.

57. (Amended) The invention as in claim 40, wherein said first jaw is inwardly biased for engaging said first end stop and wherein said second jaw is inwardly biased for engaging said first end stop.

58. The invention as in claim 40, wherein said fastening strips comprise U-channel closure type

fastening strips.

59. The invention as in claim 40, wherein said fastening strips comprise arrowhead type fastening strips.

60. The invention as in claim 40, wherein said fastening strips comprise profile type fastening strips.

61. (Amended) A method of using a closure device comprising the steps of:
providing a first fastening strip;
providing a second fastening strip;
providing a slider adapted to be slidably disposed on said fastening strips and facilitating the occlusion of said fastening strips when moved towards a first end thereof and facilitating the deocclusion of said fastening strips when moved towards a second end thereof, said fastening strips and said slider having a longitudinal X axis and a transverse Y axis, said transverse Y axis being perpendicular to said longitudinal X axis, said fastening strips and said slider having a vertical Z axis, said vertical Z axis being perpendicular to said longitudinal X axis, said vertical Z axis being perpendicular to said transverse Y axis, a first end stop at said first end, said slider comprising a housing having a first jaw and a second jaw for engaging said first end stop when said slider is moved to said first end of said fastening strips and said first jaw and second jaw thereby preventing removal of said slider from said first end of said fastening strips in said longitudinal X axis, wherein said first jaw and said second jaw are located at the first end of the slider and wherein said first jaw and said second jaw define a first slot, said first slot has a first width, said first end stop has a second width, said second width is greater than said first width;
moving said slider and engaging the first end stop.

62. (Amended) The invention as in claim 61 having a second end stop at said second end and wherein said housing having a third jaw for engaging said second end stop when said slide is moved to said second end of said fastening strips and said third jaw thereby preventing removal of said slider from said second end of said fastening strips in said longitudinal X axis.

63. (Amended) The invention as in claim 61 wherein said first jaw and said second jaw are

positioned above the fastening strips.

64. (Amended) The invention as in claim 62 wherein said third jaw is located at the second end of the slider.

65. (Amended) The invention as in claim 62 wherein said third jaw is positioned above the fastening strips.

66. (Amended) The invention as in claim 62 wherein said third jaw is located at the second end of the slider and said third jaw is positioned above the fastening strips.

67. (Amended) The invention as in claim 62 wherein a fourth jaw and said third jaw are located at said second end of the slider.